

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A method of fabricating a liquid crystal display device, comprising:

forming a liquid crystal panel including first and second substrates;

forming a ferroelectric liquid crystal layer between the first and second substrates of the liquid crystal panel;

cooling the liquid crystal panel to a predetermined temperature so as to produce monostable alignment within the ferroelectric liquid crystal; [[and]]

heating the cooled liquid crystal panel substantially to room temperature; and
operating the liquid crystal display device in a monostable state.

2. (Previously Presented) The method of claim 1, wherein the predetermined temperature is in a range around -20°C.

3. (Previously Presented) The method of claim 1, wherein the ferroelectric liquid crystal layer includes an anti-ferroelectric liquid crystal layer.

4. (Previously Presented) The method of claim 1, wherein the cooling produces a chiral smectic C phase in the ferroelectric liquid crystal.

5. (Previously Presented) The method of claim 1, wherein the cooling produces a chiral smectic C_A phase in the ferroelectric liquid crystal.

6. (Original) The method of claim 1, wherein the first substrate includes a transparent material.

7. (Original) The method of claim 1, further comprising a step of forming a pixel electrode on the first substrate.

8. (Original) The method of claim 1, further comprising a step of forming a thin film transistor on the first substrate.

9. (Original) The method of claim 1, further comprising a step of forming a color filter on the second substrate.

10. (Currently Amended) A method of fabricating a liquid crystal display device, comprising:

forming a liquid crystal panel having a first substrate and a second substrate;

interposing a ferroelectric liquid crystal layer comprised of liquid crystal molecules, between the first substrate and the second substrate;

cooling the liquid crystal layer to a predetermined temperature to form a monostable alignment of the liquid crystal molecules; [[and]]

heating the cooled liquid crystal layer substantially to room temperature; and

operating the liquid crystal display device in a monostable state.

Claim 11 (Canceled).

12. (Previously Presented) A method of fabricating a liquid crystal display device according to claim 10, wherein the predetermined temperature is below a smectic phase temperature.

13. (Previously Presented) A method of fabricating a liquid crystal display device according to claim 12, wherein the liquid crystal layer is subsequently heated above the smectic phase temperature.

14. (Previously Presented) A method of fabricating a liquid crystal display device according to claim 10, wherein the predetermined temperature is about -20C.

15. (Previously Presented) A method of fabricating a liquid crystal display device according to claim 10, wherein the ferroelectric liquid crystal layer includes an anti-ferroelectric liquid crystal layer.

16. (Previously Presented) A method of fabricating a liquid crystal display device according to claim 10, wherein the cooling produces a chiral smectic C phase in the ferroelectric liquid crystal layer.

17. (Previously Presented) A method of fabricating a liquid crystal display device according to claim 10, wherein the cooling produces a chiral smectic C_A phase in the ferroelectric liquid crystal layer.

18. (Currently Amended) A method of improving the contrast ratio of a liquid crystal display device, comprising:

forming a liquid crystal panel having a first substrate, a second substrate, and an interposed ferroelectric liquid crystal layer that is comprised of liquid crystal molecules;

cooling the liquid crystal layer to a predetermined temperature to form a monostable alignment of the liquid crystal molecules;

heating the cooled liquid crystal layer substantially to room temperature; [[and]] operating the liquid crystal display device in a monostable state; and

passing light through said liquid crystal panel.

Claim 19 (Canceled).

20. (Previously Presented) A method of improving the contrast ratio of a liquid crystal display device according to claim 18, wherein the predetermined temperature is below a smectic phase temperature.

21. (Previously Presented) A method of improving the contrast ratio of a liquid crystal display device according to claim 20, wherein the liquid crystal layer is subsequently heated above the smectic phase temperature.

22. (Previously Presented) The method of claim 1, wherein the predetermined temperature is below a smectic phase temperature.

23. (Previously Presented) The method of claim 1, wherein the ferroelectric liquid crystal layer includes 2-methylbutyl p-[p(decyloxybenzylidene)-amino]-cinnamate (DOBAMBC).

24. (Previously Presented) A method of fabricating a liquid crystal display device according to claim 10, wherein the ferroelectric liquid crystal layer includes 2-methylbutyl p-[p(decyloxybenzylidene)-amino]-cinnamate (DOBAMBC).

25. (Previously Presented) A method of improving the contrast ratio of a liquid crystal display device according to claim 18, wherein the ferroelectric liquid crystal layer includes 2-methylbutyl p-[p(decyloxybenzylidene)-amino]-cinnamate (DOBAMBC).

26. (New) A method of fabricating a liquid crystal display device, comprising:
forming a liquid crystal panel including first and second substrates;
forming a ferroelectric liquid crystal layer between the first and second substrates of the liquid crystal panel;
cooling the liquid crystal panel to a predetermined temperature so as to produce monostable alignment within the ferroelectric liquid crystal; and
heating the cooled liquid crystal panel substantially to room temperature;
wherein the predetermined temperature is in a range around -20°C.

27. (New) The method of claim 26, wherein the ferroelectric liquid crystal layer includes an anti-ferroelectric liquid crystal layer.

28. (New) The method of claim 28, wherein the cooling produces a chiral smectic C phase in the ferroelectric liquid crystal.

29. (New) The method of claim 26, wherein the cooling produces a chiral smectic C_A phase in the ferroelectric liquid crystal.

30. (New) The method of claim 26, wherein the first substrate includes a transparent material.

31. (New) The method of claim 26, further comprising a step of forming a pixel electrode on the first substrate.

32. (New) The method of claim 26, further comprising a step of forming a thin film transistor on the first substrate.

33. (New) The method of claim 26, further comprising a step of forming a color filter on the second substrate.